

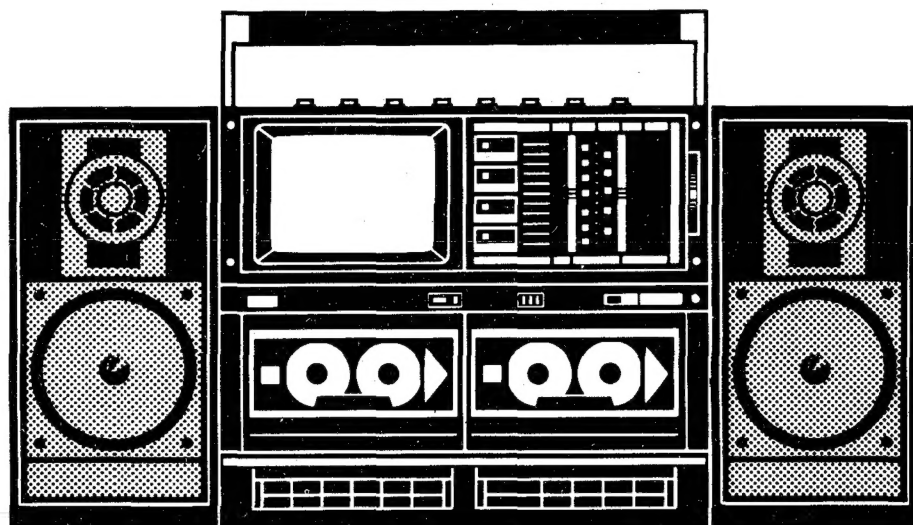
MODEL:
RTC-8310

PORTABLE 4.5" TELEVISION
WITH TWIN CASSETTE, MW/LW/FM
STEREO RADIO AND
GRAPHIC EQUALIZER



TENSAI
INTERNATIONAL

AR37



Service Manual

SPECIFICATIONS

TV SECTION

C.R.T. 4.5" B/W, 90°
Channel VHF (L) : 2-4 ch
VHF (H) : 5-12 ch
UHF : 21-69 ch

IF Frequency

Video 38.9 MHz
Sound 33.4 MHz
Sensitivity VHF: 15dB
UHF: 20dB
High Voltage 7.2Kv MAX
Matching Unit 75 ohm
(Connected by External Terminal)

FM SECTION

Frequency Range 87.5-108 MHz
30dB S/N Sensitivity ... 22dB
Image Rejection 30dB
S/N Ratio 62dB
Separation 24dB

LW SECTION

Frequency Range 145-315KHz
20dB S/N Sensitivity ... 62dB
Image Rejection 32dB
MAX Sensitivity 54dB

MW SECTION

Frequency Range 525-1605 KHz
20dB S/N Sensitivity ... 51dB
Image Rejection 42dB
S/N Ratio 40dB

CASSETTE SECTION

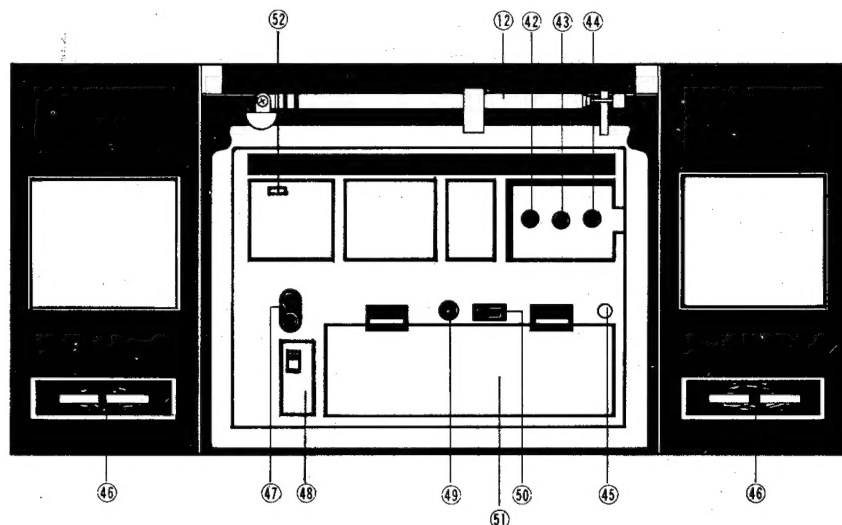
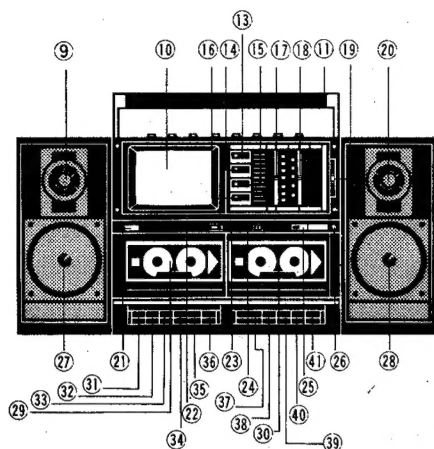
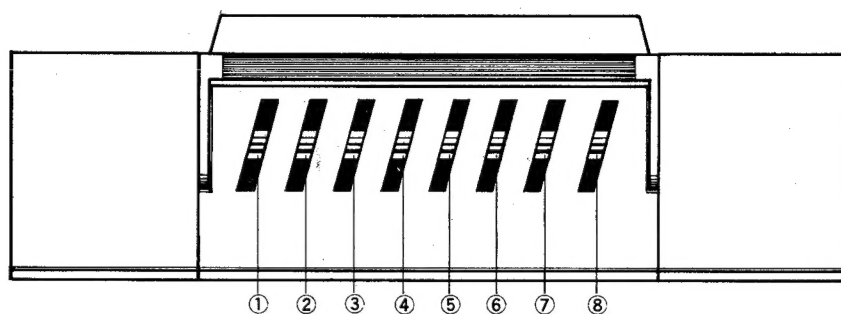
Tape Speed 4.75cm/sec.
Wow & Flutter 0.25%
S/N Ratio 42dB
CH. Separation 40dB
Rec. System AC Bias
Erasing System AC Erase
F.F/REW Time 110sec, (C-60)

GENERAL

Power Source
AC 220V 50Hz
DC 15V (UM-1, "D" Size x 10)
MAX. Output Power ... 1.5W x 2
Speaker 3", 16ohm Dynamic
 ϕ 20, Dia Piezo Tweeter
Dimension 524(W)x248(H)x160(D)mm
Weight 5.3Kg

* Specifications subject to change without notice for improvement.

CONTROL LOCATION

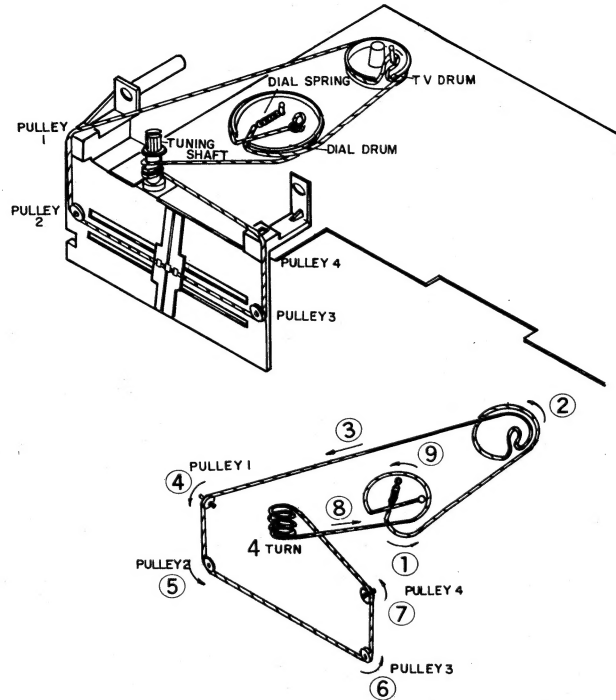


1. Function Selector Switch Tape/Radio/TV
2. Band Selector Switch AM/FM/FM Stereo
3. TV Band Selector Switch VHF-L/VHF-H/UHF
4. Graphic Equalizer 150Hz
5. Graphic Equalizer 1KHz
6. Graphic Equalizer 8KHz
7. Volume Control
8. Balance Control
9. Tweeter Speaker
10. C.R.T
11. Handle
12. Rod Ant.
13. Power Indicator
14. FM Stereo Indicator
15. Recording Indicator
16. Hi-Dubbing Indicator
17. TV Dial Pointer
18. Radio Dial Pointer
19. Tuning Knob
20. Tweeter Speaker
21. Power Switch
22. Condenser Mic
23. Tape Counter
24. Tape Noise Reduction Switch
25. Recording Selector Switch
26. Headphone Jack

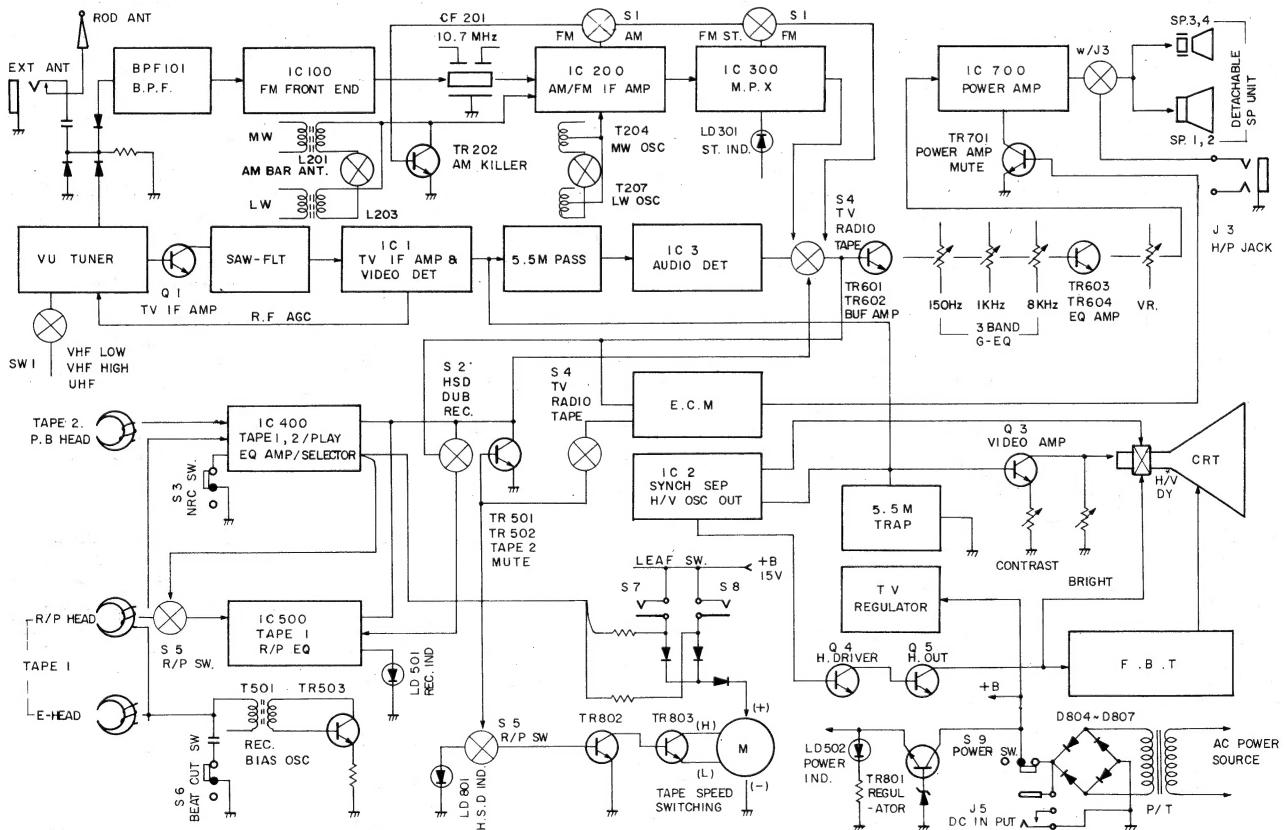
27. Left Speaker
28. Right Speaker
29. "Tape A" Cassette Door
30. "Tape B" Cassette Door
31. "Tape A" Recording Button
32. "Tape A" Play Button
33. "Tape A" Rewind Button
34. "Tape A" Fast Forward Button
35. "Tape A" Stop/Eject Button
36. "Tape A" Pause Button
37. "Tape B" Play Button
38. "Tape B" Rewind Button
39. "Tape B" Fast Forward Button
40. "Tape B" Stop/Eject Button
41. "Tape B" Pause Button
42. V-Hold
43. Contrast
44. BRT.
45. Ext. Ant. Jack
46. Speaker Cord
47. Speaker Jack L.R
48. Beat Cut Switch
49. Ext. DC12-15V Jack
50. AC Socket
51. Battery Cover
52. AM Band Selector (MW/LW)

DIAL CORD STRINGING

1. Dial String Length 1100mm.
2. Arrows 1-9 show the Correct order and Direction to run Dial String.



BLOCK DIAGRAM



AUDIO SECTION VOLTAGE CHART

1. TRANSISTOR

PIN NO. TR NO.	E	C	B
TR202	0.00	0.01	0.63
TR501,502	0.00	0.00	0.63
TR503	0.33	5.82	1.08
TR601,602	3.18	6.09	3.76
TR603,604	0.37	3.47	0.99
TR701	0.00	0.02	0.68
TR801	8.34	17.07	8.89
TR802	0.00	0.00	0.67
TR803	7.82	12.36	0.00

2. IC

NO SIGNAL

PIN NO. IC NO.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
IC100	(FM)	0.81	1.55	4.42	1.51	GND	4.44	3.68	4.39	4.45									
IC200	(FM)	0.01	0.01	2.37	2.37	0.85	0.85	NC	GND	1.47	4.59	4.59	1.43	1.43	1.43	1.43	4.59		
	(AM)	1.53	1.53	2.33	2.33	0.95	0.97	NC	GND	1.40	6.53	6.53	1.43	1.43	1.43	1.43	6.53		
IC300	(FM)	6.26	2.33	1.62	1.88	1.83	6.66	GND	0.37	2.50	1.41	1.41	0.07	1.43	1.43	1.41	0.07		
	(AM)	6.30	2.33	1.62	1.88	1.83	6.68	GND	0.37	3.29	1.41	1.41	0.07	1.43	1.43	1.41	0.06		
IC400	(PLAY)	0.00	0.00	0.00	0.00	0.61	0.61	0.73	GND	0.73	7.16	0.69	7.51	5.57	5.55	0.00	0.00	4.12	0.00
IC500	(REC)	1.78	0.00	1.78	GND	0.11	7.00	1.78	0.10	1.78									
IC700		0.57	0.00	17.24	GND	0.01	0.57	8.69	GND	17.24	8.79								

TV SECTION VOLTAGE CHARTS

1. IC

PIN NO. IC NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
IC1	7.6	0	2.6	2.17	5.40	2.1	9.58	4.75	4.77	4.8	4.8	6.26	0	7.6		
IC2	4.65	6.44	3.43	10.5	1.34	1.88	10.1	4.88	0.47	6.85	0.7	3.51	3.44	2.33	4.22	1.08
IC3	9.75	4.65	2.15	2.96	4.17	6.55	0	3.28	6.55	2.35	6.55	3.70	3.65	3.64		

2. TUNER

PIN NO.	1	2	3	4	5	6	7	8	9	10	REMARK
VHF. LOW	0	1.77	0.11	X	30.2	0	0	8.7	8.7	0	PIN 4 is Change Voltage by Position of VR the Tuning Volume
VHF. HIGH	0	1.77	0.10	X	0	0	0	8.4	8.40	0	
UHF	0	1.65	8.43	X	0	7.25	7.25	0.1	8.42	0	

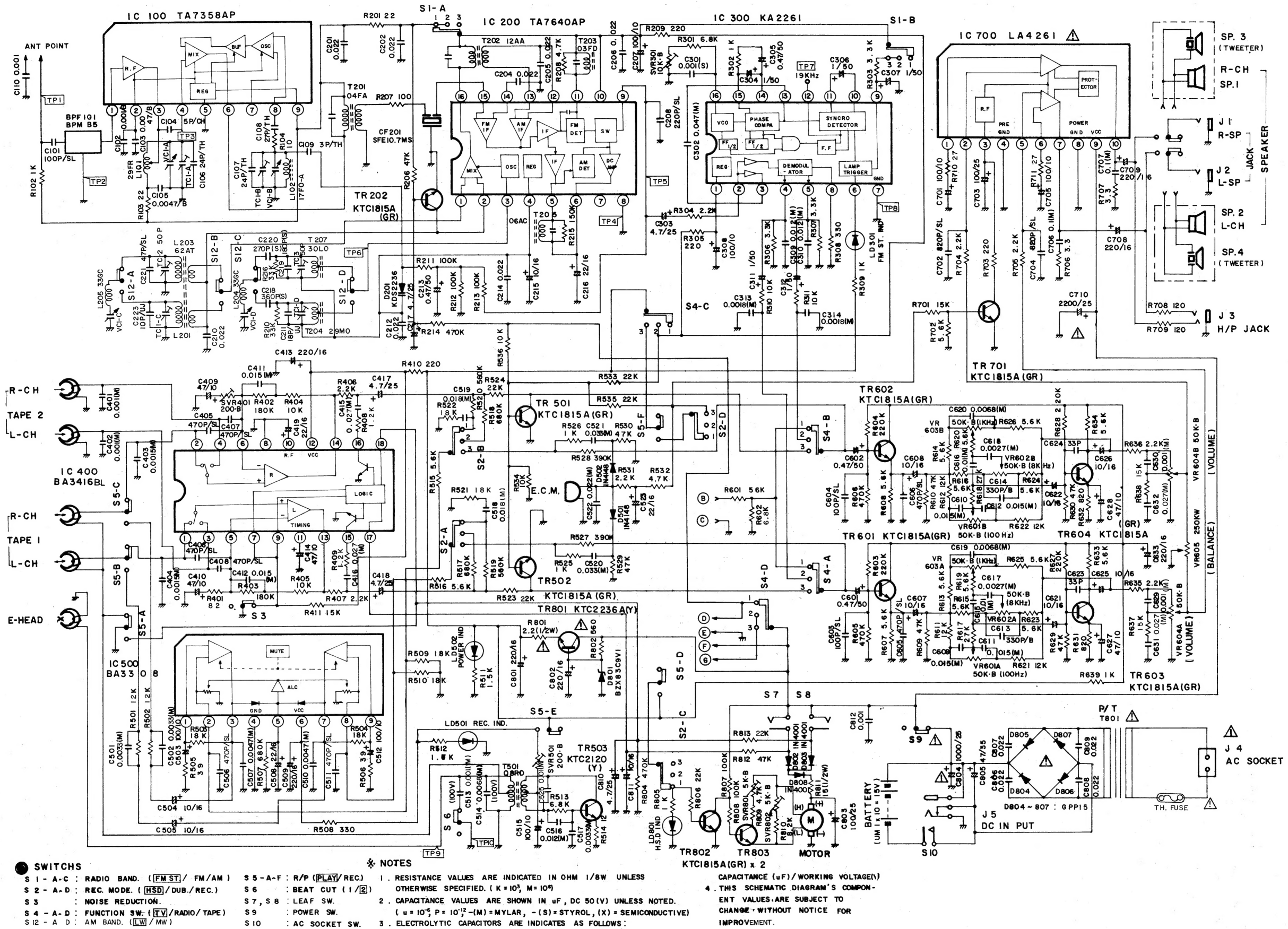
3. TRANSISTOR

PIN NO. TR. NO.	E	C	B
Q1	1.77	8.7	2.53
Q2	30.6	41.6	31.2
Q3	3.5	35.4	3.76
Q4	0	2.91	0.31
Q5	10.21	0	0
Q6	15	10.5	14.4
Q7	3.79	14.32	4.4

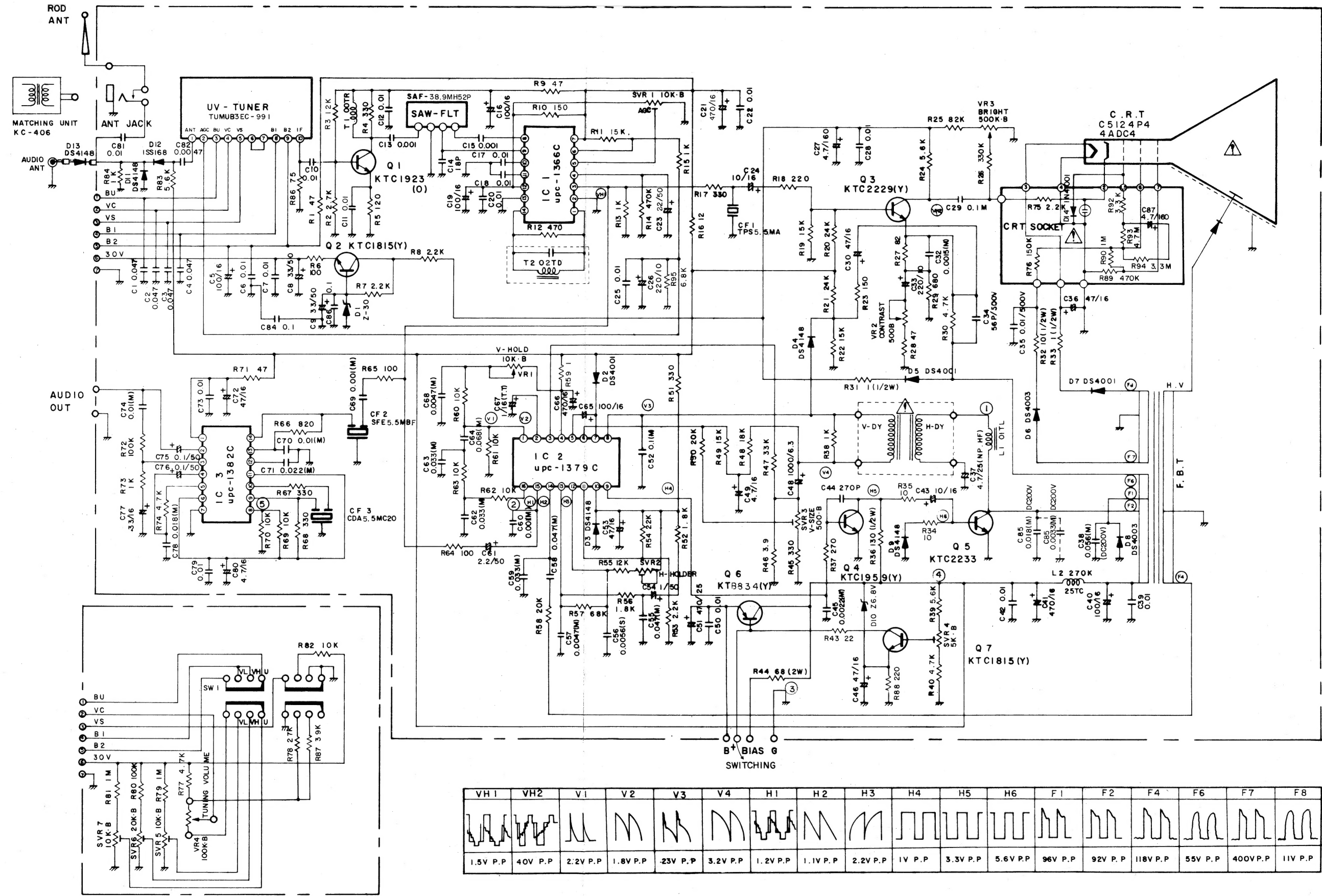
4. CRT SOCKET

PIN NO.	1	2	3	4	5	6	7
VOLTAGE	0.43	16.17	5.81	0	0.43	234	75V

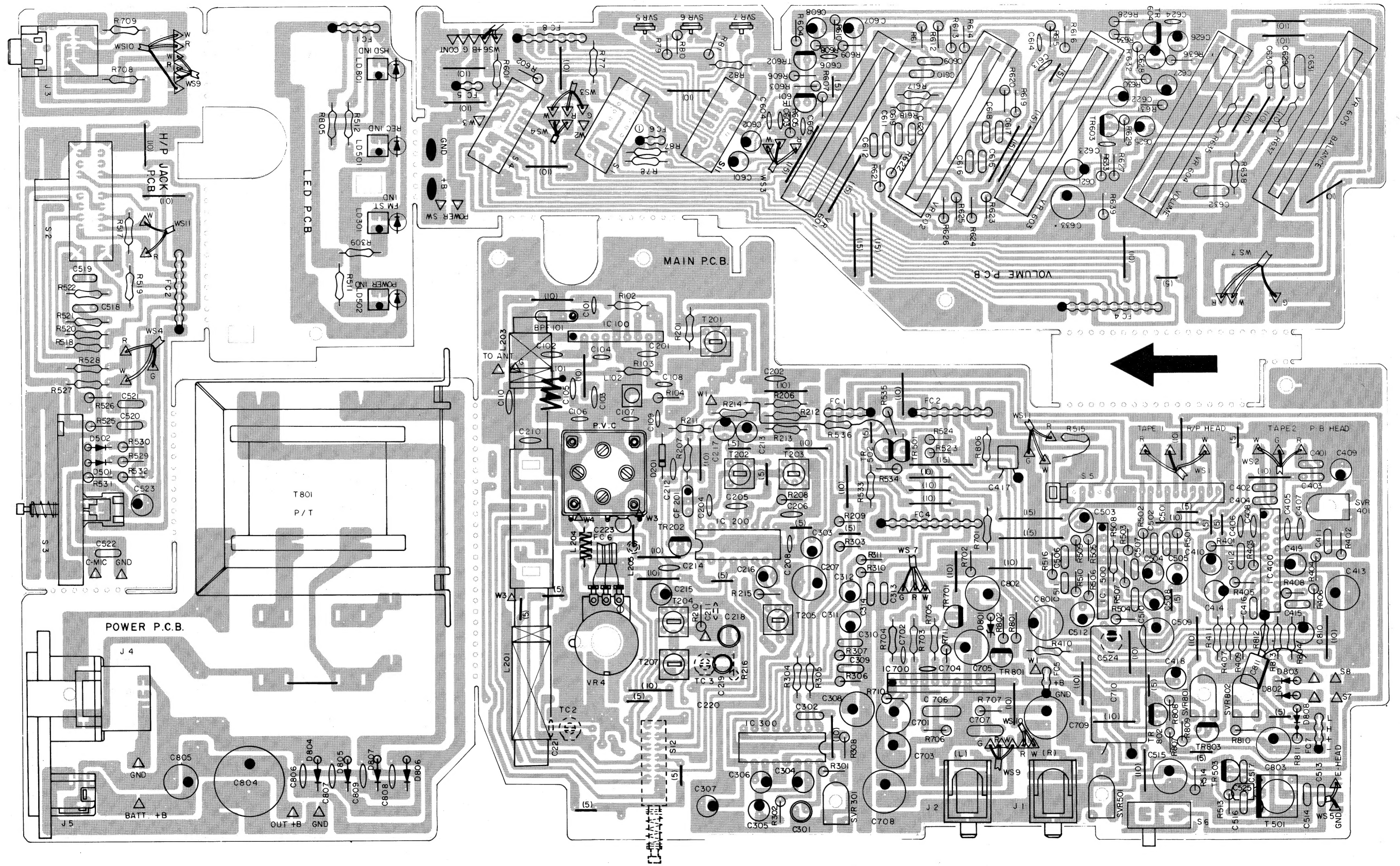
SCHEMATIC DIAGRAM (AUDIO)



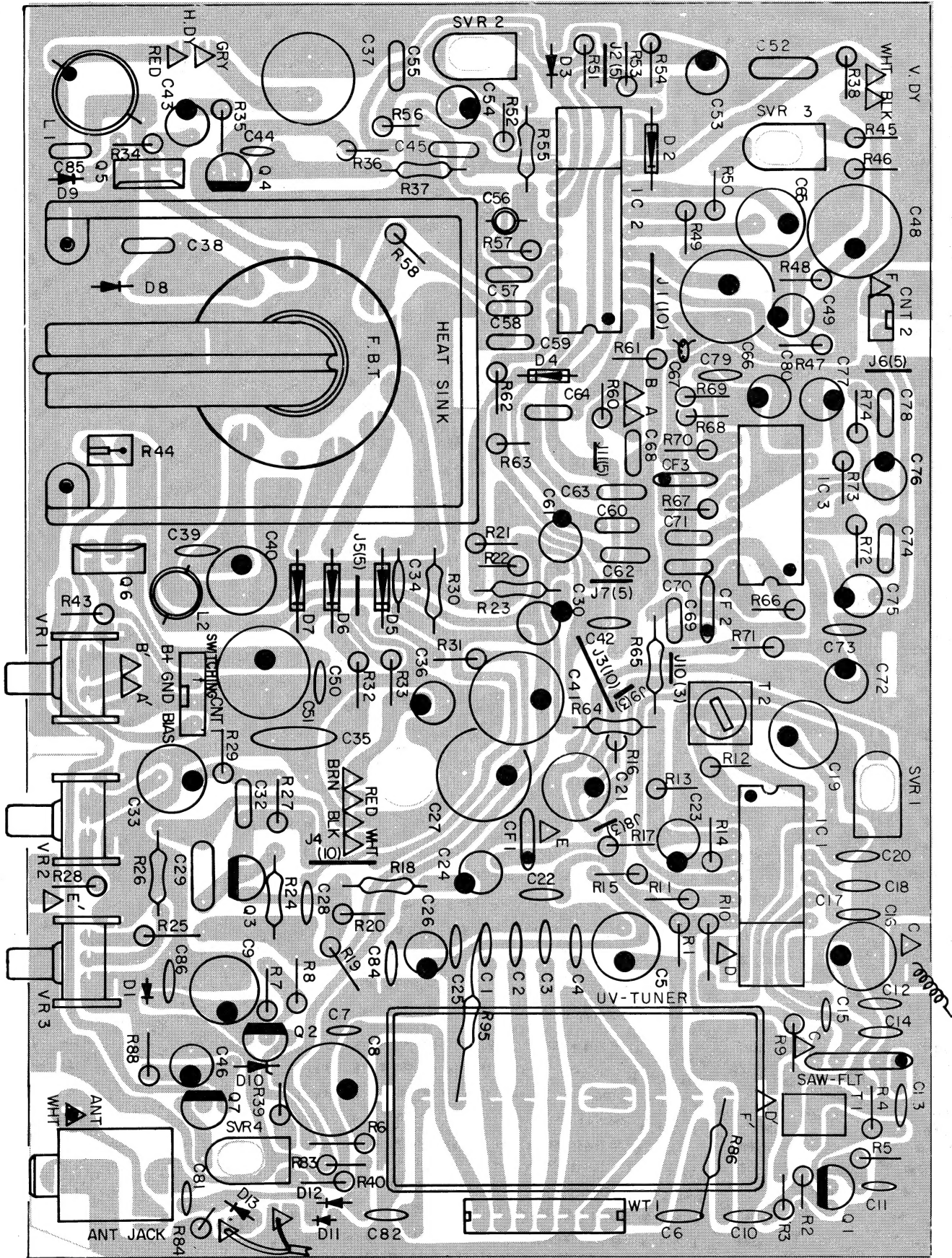
SCHEMATIC DIAGRAM (TV)



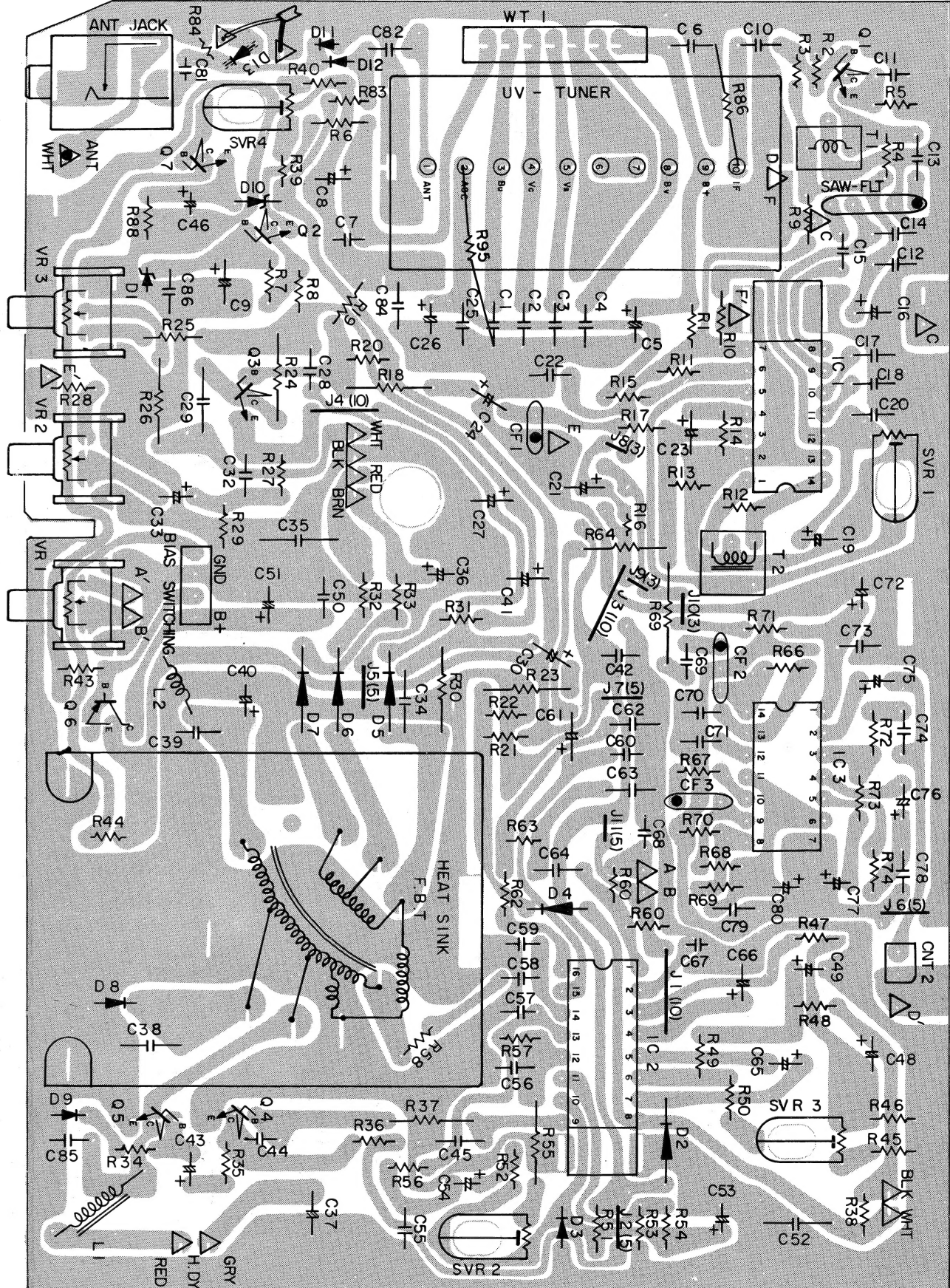
P. C. BOARD TOP VIEW (AUDIO)



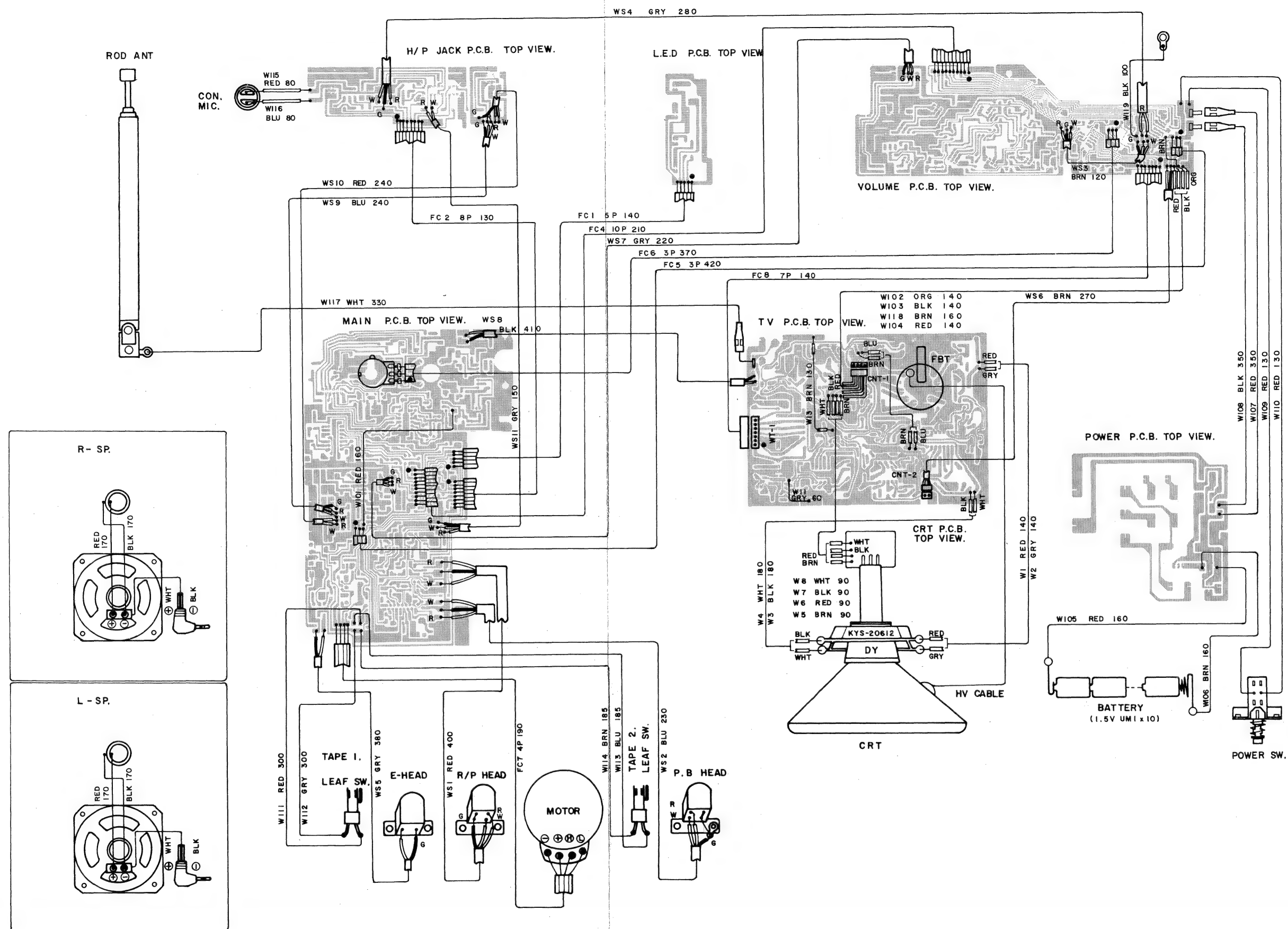
TV P. C. BOARD TOP VIEW



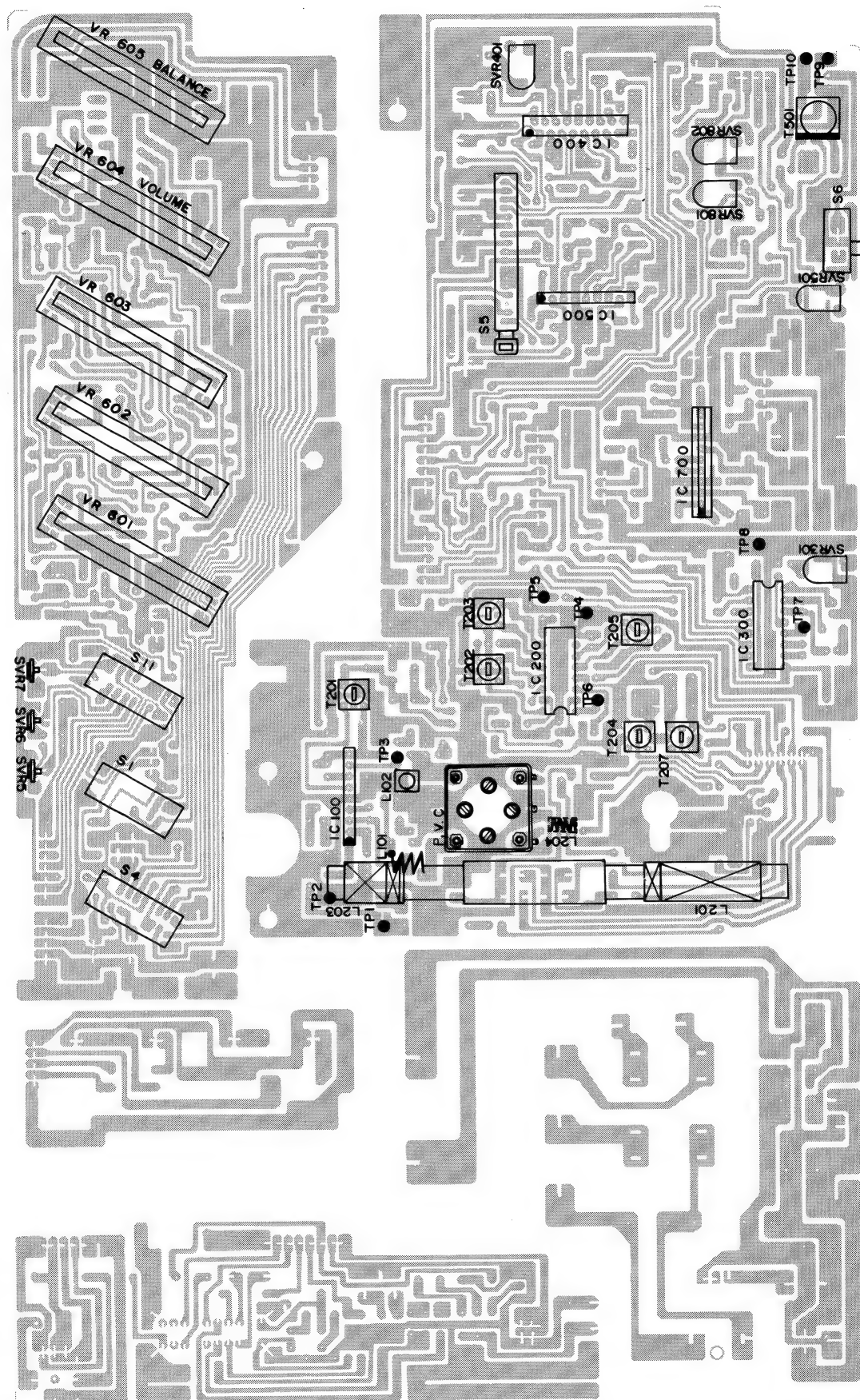
TV P. C. BOARD BOTTOM VIEW



WIRING DIAGRAM



ADJUSTMENT POINTS



TUNER ADJUSTMENTS

MW ALIGNMENT

Step	Alignment	Connection	Frequency of signal Generator	Tuning Dial setting	Adjustment	Remarks
1	IF Calibration	Fig.—3	455KHz	Low End	T202	Maximum output
2	Tuning Range	Fig.—5	515KHz	Low End	AM OSC,T204	Maximum output
3	Calibration		1650KHz	High End	TC1-D	
4	Adjustment	Fig.—5	600KHz	600KHz	Bar Ant. L201	Maximum Output
5	of Tracking		1400KHz	1400KHz	TC1-C	
6		Repeat the above adjustment				

LW ALIGNMENT

Step	Alignment	Connection	Frequency of signal Generator	Tuning Dial setting	Adjustment	Remarks
1	IF Calibration	Fig.—3	455KHz	Low End	T202	Maximum output
2	Tuning Range	Fig.—5	145KHz	Low End	LW OSC,T207	Maximum output
3	Calibration		315KHz	High End	TC3	
4	Adjustment	Fig.—5	180KHz	180KHz	Bar Ant. L203	Maximum Output
5	of Tracking		280KHz	280KHz	TC2	
6		Repeat the above adjustments.				

FM ALIGNMENT

Step	Alignment	Connection	Frequency of signal Generator	Tuning Dial setting	Adjustment	Remarks
1	IF Calibration	Fig.—4	10.7 MHz	Low End	T201, 205	Max gain and Symmetrical “S” Curve
2	Tuning Range	Fig.—6	87.37MHz	Low End	L102	Maximum output
3	Calibration		108.25MHz	High End	TC1-B	
4	Adjustment	Fig.—6	90 MHz	90 MHz	L101	Maximum Output
5	of Tracking		106 MHz	106 MHz	TC1-A	
6		Repeat the above adjustment				

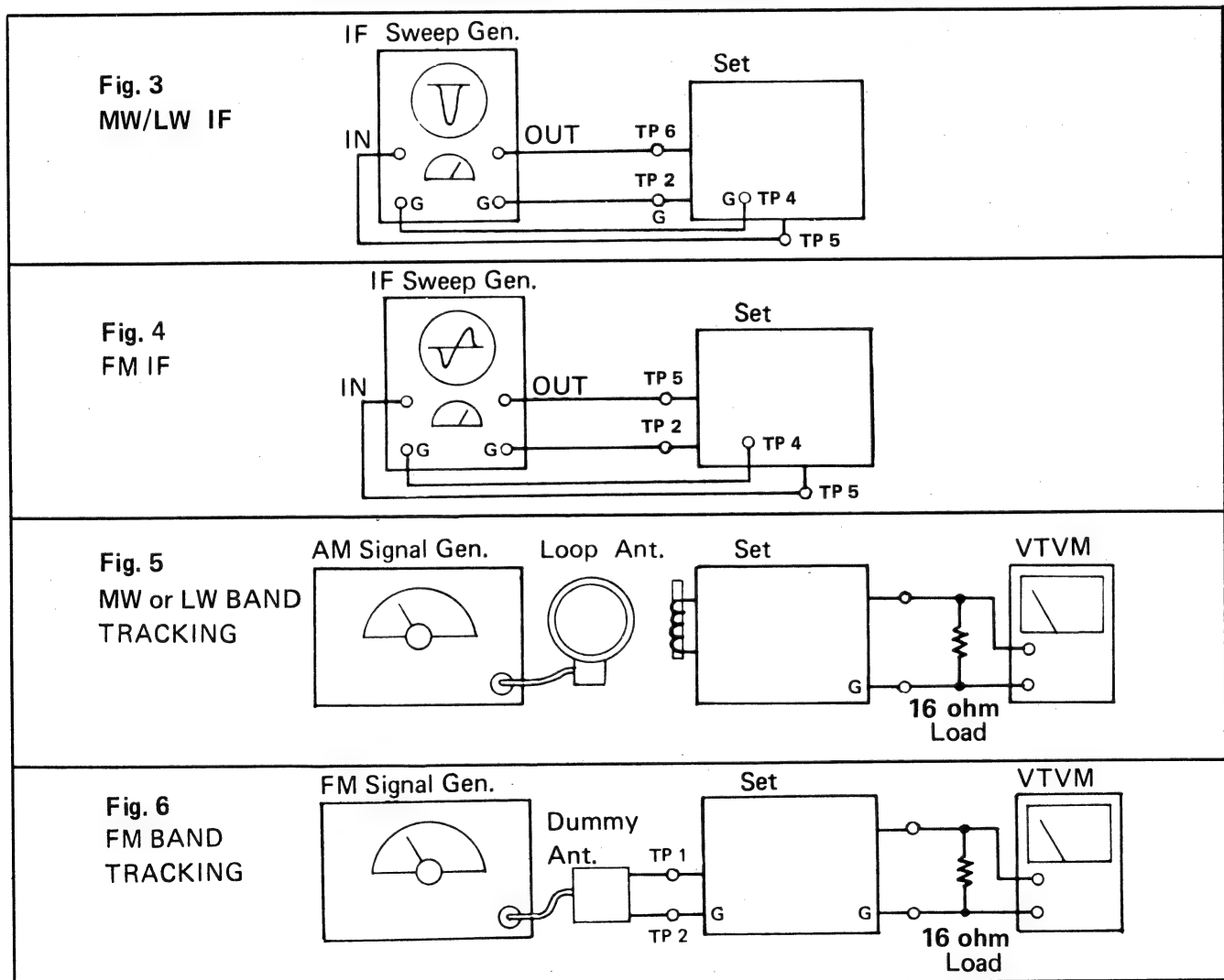
FM STEREO ADJUSTMENT

- 1) Connect a frequency counter to test points (TP 8) on the Main P.C. Board.
- 2) Set positions:
Function Switch: Radio position. Band Switch: FM position.
Mode Switch: STEREO position.
- 3) Adjust Potentiometer (SVR301) on the Main PCB for a frequency counter reading of 19 KHz.

REMARKS:

- 1) When aligning FM IF, the symmetrical curve may not be obtained by setting the marker of the Sweep Generator (10.7 MHz). This is due to the ceramic filter used in the unit. Regardless of the marker, align the curve as symmetrically as possible with peak output.
- 2) When aligning the Tuning Range and adjusting the Tracking, proceed with alignment in a sequence of FM → MW/LW.
- 3) Use a screwdriver with a plastic grip for all alignments.

EQUIPMENT CONNECTION



TAPE SPEED ADJUSTMENT

*** TAPE DECK 1**

1. Connect a frequency counter to the Headphone Jack in parallel with a 16 ohm non-reactive dummy load.
2. Adjust control on the Motor to display 3020 Hz (2940-3090Hz) on the counter while playing back an MTT-111 test tape (3000 Hz).

*** TAPE DECK 2**

1. Same as above procedure.

CHANNEL BALANCE ADJUSTMENT

*** TAPE DECK 1, 2**

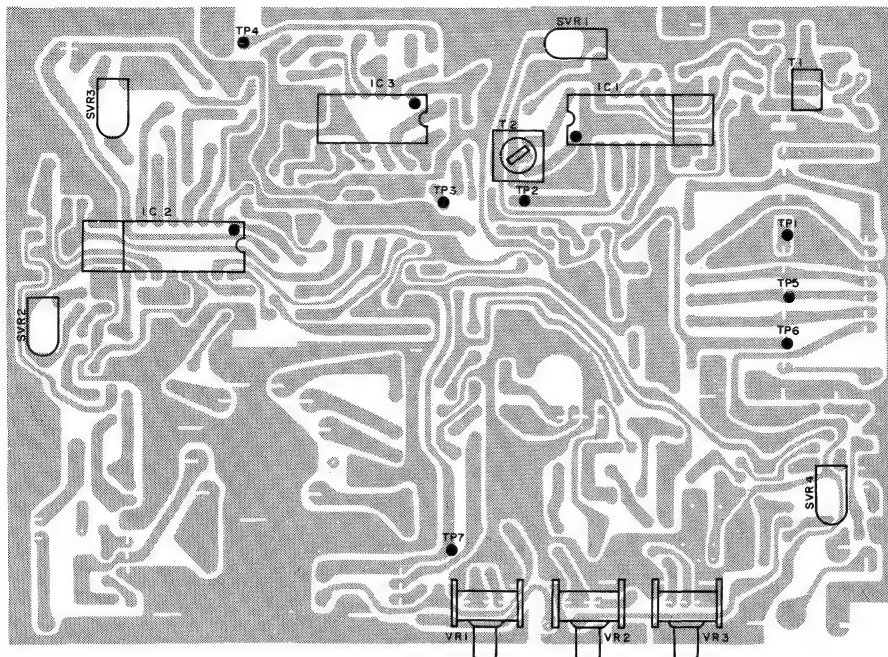
1. Connect a VTVM and a Oscilloscope to the Headphone Jack. The Dummy load should be 16 ohm.
2. Set the function switch to TAPE Position.
3. Insert a 1kHz Test Tape (MTT-118) into the TAPE DECK 1,2. Playback a test tape and adjust a potentiometer (SVR 401) on the main P.C. Board until both channels at the same level.

HIGH SPEED ADJUSTMENT

* At same above condition of Tape speed Adjustment.

1. Adjust potentiometer SVR 802 becomes 6 kHz.
2. Adjust potentiometer SVR 801 becomes 3 kHz to Frequency counter.

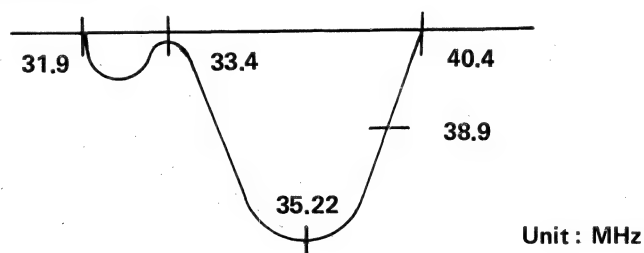
ADJUSTMENT POINTS



TV ADJUSTMENT

1) PIF CURVE ADJUSTMENT

- * Frequency : 31.9MHz, 33.4MHz, 35.22MHz, 38.9MHz, 40.4MHz
- * Method of Measurement and Curve.

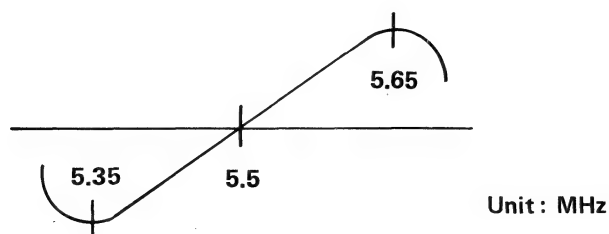


As above PIF Curve

- 1) Adjustment Semi VR (VR1) for RF AGC Maximum.
- 2) Adjustment DET Coil (T2) becomes PIF Curve.

2) SIF CURVE ADJUSTMENT

- * Frequency setting : 5.35MHz, 5.5MHz, 5.65MHz.



As above SIF Curve

- 1) Connect a sweemar scope to (TP 3) and (TP 4).
- 2) Display "S" type Curve to sweemar scope.

3) PICTURE CENTER ADJUSTMENT

* Method of Measurement

- 1) Becomes Minimum Vertical size by adjust SVR 3.
- 2) Adjustment center magnet of D.Y.

4) COVER RANGE OF TUNING VOLTAGE

At UHF Band : Adjustment SVR7 becomes low voltage 0.5V and high voltage 27.9V.

At VHF (L) Band : Adjustment SVR5 becomes low voltage 1V and high voltage 23.7V.

At VHF (H) Band : Adjustment SVR6 becomes low voltage 3V and high voltage 24.7V.

Same as above procedure

- 1) When low voltage, becomes minimum position by adjustment tuning VR (VR4).
- 2) When high voltage, adjustment tuning VR (VR 4) becomes maximum position.
- 3) Repeat the above adjustment.

5) V- HOLD AND H- HOLD ADJUSTMENT

Methods of Measurement

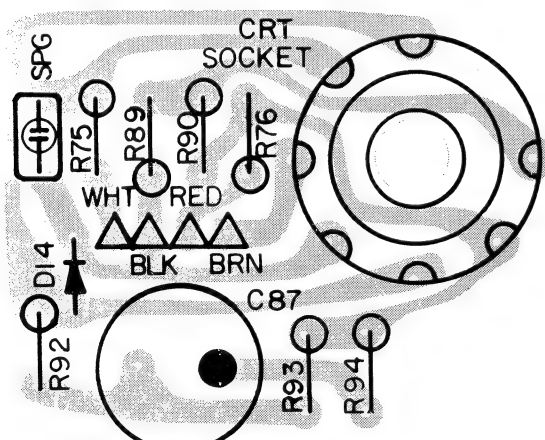
- 1) 4 CH setting to test pattern signal.
- 2) Adjust VR1 becomes input to vertical Synchronization signal.
- 3) Adjustment SVR 2 becomes input to horizontal synchronization signal.

6) RF AGC ADJUSTMENT

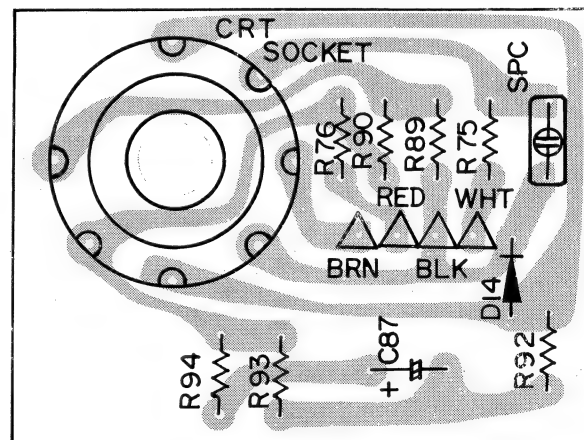
Connect DC voltmeter to AGC terminal of tuner and adjustment SVR 1 becomes 2.7V.

CRT SOCKET PCB

TOP VIEW



BOTTOM VIEW



ELECTRICAL PARTS LIST

(AUDIO)

SYMBOL NO.	PART NO.	DESCRIPTION	Q'TY	SYMBOL NO.	PART NO.	DESCRIPTION	Q'TY
IC100		TA7358AP FM F/E IC	1	C106,107		24PF 50V, CERAMIC CAPACITOR	2
IC200		K1A7640AP AM/FM IF IC	1	C108		27PF 50V, CERAMIC CAPACITOR	1
IC300		KA2261 MPX IC	1	C623,624		33PF 50V, CERAMIC CAPACITOR	2
IC400		BA3416BL PLAY EQ IC	1	C101,603,604		100PF 50V, CERAMIC CAPACITOR	3
IC500		BA3308 REC IC	1	C208		220PF 50V, CERAMIC CAPACITOR	1
IC700		LA4261 POWER IC	1	C613,614		330PF 50V, CERAMIC CAPACITOR	2
TR202,501,502,802,803,601,602,603,604,701		KTC1815A(GR) TRANSISTOR	10	C405,406,407,408,506,511,606,605		470PF 50V, CERAMIC CAPACITOR	8
TR503		KTC2120(Y) TRANSISTOR	1	C702,704		820PF 50V, CERAMIC CAPACITOR	2
TR801		KTC2236A(Y) TRANSISTOR	1	C102,110,812		0.01μF 50V, CERAMIC CAPACITOR	3
D201		KDS2236 VARICAP DIODE	1	C103,105		0.047μF 50V, CERAMIC CAPACITOR	2
D501,502		1N4148 SWITCHING DIODE	2	C201,202,204,205,206,210,212,214,806,807,808,809		0.022μF 50V, CERAMIC CAPACITOR	12
D801		BZX83-C9V1 ZENER DIODE	1	C223		10PF 50V, CERAMIC CAPACITOR	1
D802,803,808		1N4001 RECTIFIER DIODE	3	C221		47PF 50V, CERAMIC CAPACITOR	1
D804,805,806,807		GPP-15B RECTIFIER DIODE	4	C401,402,629,630		0.001μF 50V, MYLAR CAPACITOR	4
LD301		SLB-55MG5 LED DIODE	1	C631,632,415,416		0.027μF 50V, MYLAR CAPACITOR	4
LD501,502		SLB-55VR5 LED DIODE	2	C617,618		0.0027μF 50V, MYLAR CAPACITOR	2
LD801		SLB-55YY5 LED DIODE	1	C507,510		0.0047μF 50V, MYLAR CAPACITOR	2
BPF101		BPMB5 BAND PASS FILTER	1	C619,620		0.0068μF 50V, MYLAR CAPACITOR	2
CF201		SFE10.7MS2 FM IF FILTER	1	C514		0.0068μF 100V, MYLAR CAPACITOR	1
T201		04FA FM 1st IFT	1	C525,615,616		0.01μF 50V, MYLAR CAPACITOR	3
T202		12AA AM 1st IFT	1	C516,309,310		0.012μF 50V, MYLAR CAPACITOR	3
T203		03FD FM DET IFT	1	C411,412,609,610,611,612		0.015μF 50V, MYLAR CAPACITOR	6
T205		06AC AM DET IFT	1	C522		0.022μF 50V, MYLAR CAPACITOR	1
T204		29MO MW OSC COIL	1	C520,521		0.033μF 50V, MYLAR CAPACITOR	2
T207		30LO LW OSC COIL	1	C706,707		0.1μF 50V, MYLAR CAPACITOR	2
L101		29FR FM RF COIL	1	C313,314		0.0018μF 50V, MYLAR CAPACITOR	2
L102		17FO-A FM OSC COIL	1	C502		0.047μF 50V, MYLAR CAPACITOR	1
L201,203		62AT MW/LW BAR ANT.	1	C513		0.001μF 100V, MYLAR CAPACITOR	1
L204,205		PEAKING COIL	2	C518,519		0.018μF 100V, MYLAR CAPACITOR	2
T501		08RO BIAS OSC COIL	1	C517,501,502		0.033μF 50V, MYLAR CAPACITOR	3
T801		57-37P-VF POWER TRANSFORMER	1	C213,305,601,602		0.47μF 50V, ELECTROLYTIC CAPACITOR	4
DECK		TN-21SW-501 DECK MECHANISM	1	C304,306,307,311,312		1μF 50V, ELECTROLYTIC CAPACITOR	5
VR601,602,603		S3028KC-50KBx2 VARIABLE RESISTOR	3	C217,303,417,418,810		4.7μF 25V, ELECTROLYTIC CAPACITOR	5
VR604		S3028HC-50KBx2 VARIABLE RESISTOR	1	C215,504,505,607,608,621,622,625,626,811		10μF 16V, ELECTROLYTIC CAPACITOR	10
VR605		S3018KC-250KW VARIABLE RESISTOR	1	C403,404		0.0015μF 50V, MYLAR CAPACITOR	2
SVR301		RVM083H-1 10KB SEMIFIXED RESISTOR	1				
SVR401,501		RVM083H-1 200B SEMIFIXED RESISTOR	2				
SVR801,802		RVM083H-1 5KB SEMIFIXED RESISTOR	2				
S1,4		00430014BC FUNCTION, RATIO BAND SWITCH	2				
S2		00430185 HSD./DUBBING/REC. SWITCH	1				
S3		TR2321279 N.R.C SWITCH	1				
S5		00620434N REC. SWITCH	1				
S6		00120050 BEAT CUT SWITCH	1				
S9		SDW-1P POWER SWITCH	1				
S12		R2320549-Q MW/LW BAND SELECTOR SWITCH	1				
J1,2		HSJ0707-01-020 SPEAKER JACK	2				
J3		HSJ0924-01-140 HEADPHONE JACK	1				
J4		HSC1462-01-010 AC IN LET. JACK	1				
SP1,2		CS9T2948B SPEAKER	2				
SP3,4		WSS-20-15 PIEZO TWEETER SPEAKER	2				
ROD ANT.		5B180B ROD ANT.	1				
VC1,4		PVC-22KT-LD1 POLY VARICON	1				
TC2,3		CV05A 500 TRIMMER CAPACITOR	2				
CON. MIC		JS-80C CONDENSER MIC	1				
C211		18PF 50V, CERAMIC CAPACITOR	1				
C104		5PF 50V, CERAMIC CAPACITOR	1				
C109		3PF 50V, CERAMIC CAPACITOR	1				

SYMBOL NO.	PART NO.	DESCRIPTION	Q'TY	SYMBOL NO.	PART NO.	DESCRIPTION	Q'TY
C216,419, 508,523 C409,410, 414,627,628 C805		22μF 16V, ELECTROLYTIC CAPACITOR	4	R605,606		470Kohm CARBON FILM, 1/8W P.R	2
C207,308, 503,512,515, 701,705 C703,803		47μF 10V, ELECTROLYTIC CAPACITOR	5	R507		680Kohm CARBON FILM, 1/8W P.R	1
C413,509, 603,708,709 801,802 C804		47μF 35V, ELECTROLYTIC CAPACITOR	1	R404,406, 310,534 R535		10Kohm CARBON FILM, 1/8W P.R	4
C701		100μF 10V, ELECTROLYTIC CAPACITOR	7	R210,216		22Kohm CARBON FILM, 1/8W P.R	1
C301		100μF 25V, ELECTROLYTIC CAPACITOR	2	R215		33Kohm CARBON FILM, 1/8W P.R	2
C218		220μF 16V, ELECTROLYTIC CAPACITOR	7	R402,403		150Kohm CARBON FILM, 1/8W P.R	1
C220		1000μF 25V, ELECTROLYTIC CAPACITOR	1	R801		180Kohm CARBON FILM, 1/8W P.R	2
C219		2200μF 25V, ELECTROLYTIC CAPACITOR	1	R811		2.2ohm FUSING, 1/2W P.R	1
R706,707		0.001μF 50V, SYTROL CAPACITOR	1	R103,201		15ohm FUSING, 1/2W P.R	1
R104		360PF 50V, STYROL CAPACITOR	1	R207		22ohm CARBON FILM, 1/8W P.M	2
R514		270PF 50V, STYROL CAPACITOR	1	R708,709		100ohm CARBON FILM, 1/8W P.M	1
R505,506		180PF 50V, STYROL CAPACITOR	1	R305,410, 703 R508		120ohm CARBON FILM, 1/8W P.M	2
R209		3.3ohm CARBON FILM, 1/8W P.R	1	R409,102, 309,805 R511,512		220ohm CARBON FILM, 1/8W P.M	3
R308		10ohm CARBON FILM, 1/8W P.R	1	R304,407, 635,704,705 R409		330ohm CARBON FILM, 1/8W P.M	1
R802		12ohm CARBON FILM, 1/8W P.R	1	R521,522		1Kohm CARBON FILM, 1/8W P.M	4
R631,632		39ohm CARBON FILM, 1/8W P.R	2	R411,637, 638,701 R533,806		1.5Kohm CARBON FILM, 1/8W P.M	2
R302,525, 526,639 R406,531, 636 R303,306, 307 R401		220ohm CARBON FILM, 1/8W P.R	1	R617,618		2.2Kohm CARBON FILM, 1/8W P.M	4
R532,208, 809 R607,608, 613,614,615, 616,619,620, 623,624,625, 626,633,634, 702,515,516 R301,513, 602 R810		330ohm CARBON FILM, 1/8W P.R	1	R206,812, 813 R211,212, 213 R601		1.2Kohm CARBON FILM, 1/8W P.M	1
R501,502,611, 612,621,622 R509,510,503, 504 R523,524		820ohm CARBON FILM, 1/8W P.R	2	R527,528		18Kohm CARBON FILM, 1/8W P.M	2
R710,711 R408		1Kohm CARBON FILM, 1/8W P.R	4	R519,520		15Kohm CARBON FILM, 1/8W P.M	4
R529,530,609, 610,629,630 R807,808		2.2Kohm CARBON FILM, 1/8W P.R	3	R517,518		22Kohm CARBON FILM, 1/8W P.M	2
R603,604, 627,628		3.3Kohm CARBON FILM, 1/8W P.R	3	R214,804		27Kohm CARBON FILM, 1/8W P.M	2
		4.7Kohm CARBON FILM, 1/8W P.R	3	R311,536 (TV SECTION) VR4		47Kohm CARBON FILM, 1/8W P.M	3
		5.6Kohm CARBON FILM, 1/8W P.R	17	SVR5,7		100Kohm CARBON FILM, 1/8W P.M	3
		12Kohm CARBON FILM, 1/8W P.R	6	SVR6		56Kohm CARBON FILM, 1/8W P.M	1
		18Kohm CARBON FILM, 1/8W P.R	4	SW1		390Kohm CARBON FILM, 1/8W P.M	2
		22Kohm CARBON FILM, 1/8W P.R	2	R82		560Kohm CARBON FILM, 1/8W P.M	2
		27ohm CARBON FILM, 1/8W P.R	2	R77		680Kohm CARBON FILM, 1/8W P.R	2
		1.2Kohm CARBON FILM, 1/8W P.R	1	R78		470Kohm CARBON FILM, 1/8W P.R	2
		47Kohm CARBON FILM, 1/8W P.R	6	R87		10Kohm CARBON FILM, 1/8W P.M	2
		100Kohm CARBON FILM, 1/8W P.R	2	R79,81		K161100-10KB, TV TUNING VOLUME	1
		220Kohm CARBON FILM, 1/8W P.R	4	R80		RVM083V-1 10KB, SEMIFIXED RESISTOR	2
						RVM083V-1 20KB, SEMIFIXED RESISTOR	1
						00430014BC SLIDE SWITCH	1
						10Kohm CARBON FILM, 1/8W P.M	1
						4.7Kohm CARBON FILM, 1/8W P.M	1
						27Kohm CARBON FILM, 1/8W P.M	1
						39Kohm CARBON FILM, 1/8W P.M	1
						1M ohm CARBON FILM, 1/8W P.R	2
						100Kohm CARBON FILM, 1/8W P.R	1

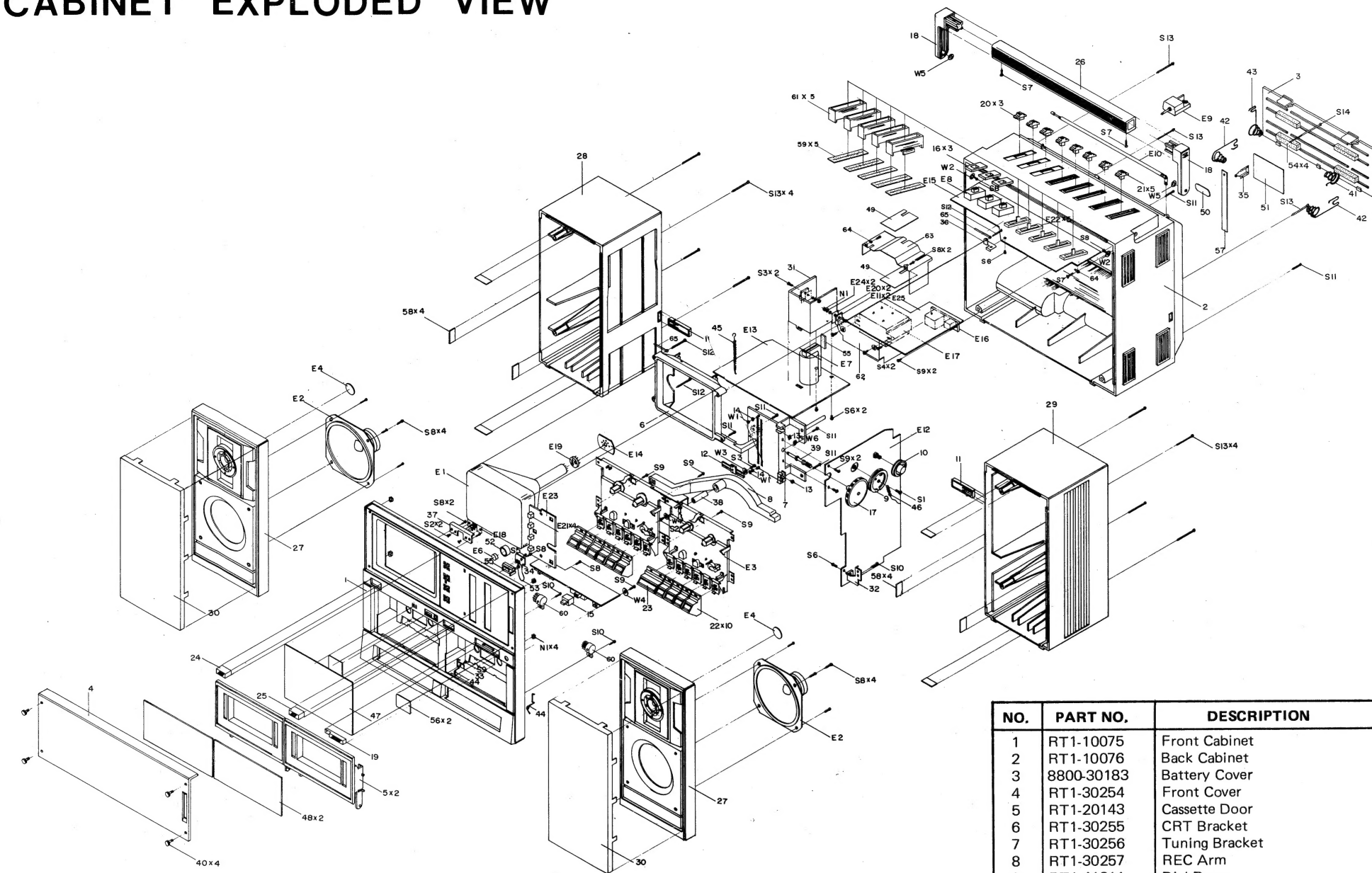
(TV)

SYMBOL NO.	PART NO.	DESCRIPTION	Q'TY	SYMBOL NO.	PART NO.	DESCRIPTION	Q'TY
C.R.T		4ADC4 C.R.T	1	R13,38,73		1Kohm CARBON FILM, 1/8W P.R	3
F.B.T		KFS-20998 F.B.T	1	R10		150ohm CARBON FILM, 1/8W P.R	1
D.Y		KYS-20612 D.Y	1	R52,56		1.8Kohm CARBON FILM, 1/8W P.R	2
UV-TUNER		TUMUB3EC-991 UV-TUNER	1	R84		1Kohm CARBON FILM, 1/16W P.R	1
IC1		uPC-1366C IC	1	R7,8,53		2.2Kohm CARBON FILM, 1/8W P.R	3
IC2		uPC-1379C IC	1	R2		2.7Kohm CARBON FILM, 1/8W P.R	1
IC3		uPC-1382 IC	1	R60,61,62, 63,69,70		10Kohm CARBON FILM, 1/8W P.R	6
Q1		KTC1923-0 TRANSISTOR	1	R11,19,22,49		15Kohm CARBON FILM, 1/8W P.R	4
Q2,7		KTC1815-Y TRANSISTOR	2	R48		18Kohm CARBON FILM, 1/8W P.R	1
Q3		KTC2229-Y TRANSISTOR	1	R50,58		20Kohm CARBON FILM, 1/8W P.R	2
Q4		KTC1959-Y TRANSISTOR	1	R54		22Kohm CARBON FILM, 1/8W P.R	1
Q5		KTC2223 TRANSISTOR	1	R20,21		24Kohm CARBON FILM, 1/8W P.R	2
Q6		KT8834Y or KT8596 TRANSISTOR	1	R47		33Kohm CARBON FILM, 1/8W P.R	1
D1		EQA02-30B (30V, 1/2W) ZENER DIODE	1	R25		82Kohm CARBON FILM, 1/8W P.R	1
D2,5,7		DS4001 SI DIODE	3	R57		68Kohm CARBON FILM, 1/8W P.R	1
D3,4,9,11,13		DS4148 SWITCHING DIODE	5	R72		100Kohm CARBON FILM, 1/8W P.R	1
D6,8		DS4003 SI DIODE	2	R14		470Kohm CARBON FILM, 1/8W P.R	1
D10		EQA02-7B(6.8V, 1/2W) ZENER DIODE	1	R40,74		4.7Kohm CARBON FILM, 1/8W P.R	2
D12		1S168 SWITCHING DIODE	1	R39,83		5.6Kohm CARBON FILM, 1/8W P.R	2
D14		1N4001 SI DIODE	1	R3		12Kohm CARBON FILM, 1/8W P.R	1
SAW-FLT.		SAF-38.9MH52P SAW FILTER	1	R64,65		100ohm CARBON FILM, 1/8W P.S	2
CF1		TPS-5.5MA CERAMIC FILTER	1	R23		150ohm CARBON FILM, 1/8W P.S	1
CF2		SFE5.5MBF CERAMIC FILTER	1	R18		220ohm CARBON FILM, 1/8W P.S	1
CF3		CDA-5.5MC20 CERAMIC FILTER	1	R37		270ohm CARBON FILM, 1/8W P.S	1
SVR1		TT-24R 10KB SEMI VOLUME	1	R86		75ohm CARBON FILM, 1/8W P.S	1
SVR2,4		TT-24R 5KB SEMI VOLUME	2	R24		5.6Kohm CARBON FILM, 1/8W P.S	1
SVR3		TT-24R 5KB SEMI VOLUME	1	R30		4.7Kohm CARBON FILM, 1/8W P.S	1
VR1		EVU-E2AM20B14 VOLUME	1	R55		12Kohm CARBON FILM, 1/8W P.S	1
VR2		EVU-E2AM20B52 VOLUME	1	R26		330Kohm CARBON FILM, 1/8W P.S	1
VR3		EVU-E2AM20B55 VOLUME	1	R15		1Kohm CARBON FILM, 1/8W P.S	1
T1		01TR RF IFT	1	R36		130ohm CARBON FILM, 1/2W P.R	1
T2		02TD DET IFT	1	R31,33		1ohm CARBON FILM, 1/2W P.R	2
L2		25TC INDUCTOR COIL	1	R32		10ohm CARBON FILM, 1/2W P.R	1
L1		01TL LINERARITY COIL	1	R44		68ohm CARBON FILM, 1/2W P.R	1
MONO JACK		HSJ0707-01-020 MONO JACK	1	C67		1μF 16V, TANTAL CAPACITOR	1
MATCHING UNIT		KC-406 MATCHING UNIT	1	C56		0.0056μF 50V, STYROL CAPACITOR	1
CRT SOCKET		NPS0051-01-010 CRT SOCKET	1				
SPARK GAP		AGB15P202FS-K2M SPARK GAP	1				
R59		1ohm CARBON FILM, 1/8W P.R	1				
R46		3.9ohm CARBON FILM, 1/8W P.R	1				
R34,35		10ohm CARBON FILM, 1/8W P.R	2				
R16		12ohm CARBON FILM, 1/8W P.R	1				
R1,9,28,71		47ohm CARBON FILM, 1/8W P.R	4				
R27		82ohm CARBON FILM, 1/8W P.R	1				
R6		100ohm CARBON FILM, 1/8W P.R	1				
R5		120ohm CARBON FILM, 1/8W P.R	1				
R43		22ohm CARBON FILM, 1/8W P.R	1				
R4,17,45,51, 67,68		330ohm CARBON FILM, 1/8W P.R	6				
R88		220ohm CARBON FILM, 1/8W P.R	1				
R12		470ohm CARBON FILM, 1/8W P.R	1				
R29		680ohm CARBON FILM, 1/8W P.R	1				
R66		820ohm CARBON FILM, 1/8W P.R	1				

SYMBOL NO.	PART NO.	DESCRIPTION	Q'TY
C34		56PF 500V, CERAMIC CAPACITOR	1
C35		0.01 μ F 500V, CERAMIC CAPACITOR	1
C14		18PF 50V, CERAMIC CAPACITOR	1
C44		270PF 50V, CERAMIC CAPACITOR	1
C13,15		0.001 μ F 50V, CERAMIC CAPACITOR	2
C6,7,10,12,17,18,20,22,25,28,39,42,50,73,79,81 C11		0.01 μ F 50V, CERAMIC CAPACITOR	16
C82		560PF 50V, CERAMIC CAPACITOR	1
C1,2,3,4		0.0047 μ F 50V, CERAMIC CAPACITOR	1
C84,86		0.047 μ F 50V, CERAMIC CAPACITOR	4
C85		0.1 μ F 50V, CERAMIC CAPACITOR	2
C60,69		0.018 μ F 200V, MYLAR CAPACITOR	1
C32		0.001 μ F 100V, MYLAR CAPACITOR	1
C45		0.0015 μ F 100V, MYLAR CAPACITOR	1
C57,68		0.0022 μ F 100V, MYLAR CAPACITOR	1
C78		0.0047 μ F 100V, MYLAR CAPACITOR	2
C70,74		0.018 μ F 100V, MYLAR CAPACITOR	1
C71		0.01 μ F 100V, MYLAR CAPACITOR	2
C38		0.022 μ F 100V, MYLAR CAPACITOR	1
C59,62,63		0.056 μ F 200V, MYLAR CAPACITOR	1
C55,58		0.033 μ F 100V, MYLAR CAPACITOR	3
C64		0.047 μ F 100V, MYLAR CAPACITOR	2
C29,52		0.068 μ F 100V, MYLAR CAPACITOR	1
C75,76		0.1 μ F 100V, MYLAR CAPACITOR	2
C54,		0.1 μ F 50V, ELECTROLYTIC CAPACITOR	2
C23,61		1 μ F 50V, ELECTROLYTIC CAPACITOR	1
C49,80		2.2 μ F 50V, ELECTROLYTIC CAPACITOR	2
C24,43		4.7 μ F 16V, ELECTROLYTIC CAPACITOR	2
C77		10 μ F 16V, ELECTROLYTIC CAPACITOR	2
C30,36,46,53,72		33 μ F 16V, ELECTROLYTIC CAPACITOR	1
C5,19,40,65		47 μ F 16V, ELECTROLYTIC CAPACITOR	5
C26,33		100 μ F 16V, ELECTROLYTIC CAPACITOR	4
C21,41,66		220 μ F 10V, ELECTROLYTIC CAPACITOR	2
C48		470 μ F 16V, ELECTROLYTIC CAPACITOR	3
C8,9		1000 μ F 6.3V, ELECTROLYTIC CAPACITOR	1
C27		33 μ F 50V, ELECTROLYTIC CAPACITOR	2
		4.7 μ F 160V, ELECTROLYTIC CAPACITOR	1

SYMBOL NO.	PART NO.	DESCRIPTION	Q'TY
C37		4.7 μ F 25V (NP. HF), ELECTROLYTIC CAPACITOR	1
C51		470 μ F 25V, ELECTROLYTIC CAPACITOR	1
C16		100 μ F 16V, ELECTROLYTIC CAPACITOR	1
R75		2.2Kohm CARBON FILM, 1/8W P.R	1
R90		1Mohm CARBON FILM, 1/8W P.R	1
R94		3.3Mohm CARBON FILM, 1/8W P.R	1
R76		150Kohm CARBON FILM, 1/8W P.R	1
R89		470Kohm CARBON FILM, 1/8W P.R	1
R92		3.3Kohm CARBON FILM, 1/8W P.R	1
R93		4.7M ohm CARBON FILM, 1/8W P.R	1
C87		4.7 μ F 160V, ELECTROLYTIC CAPACITOR	1

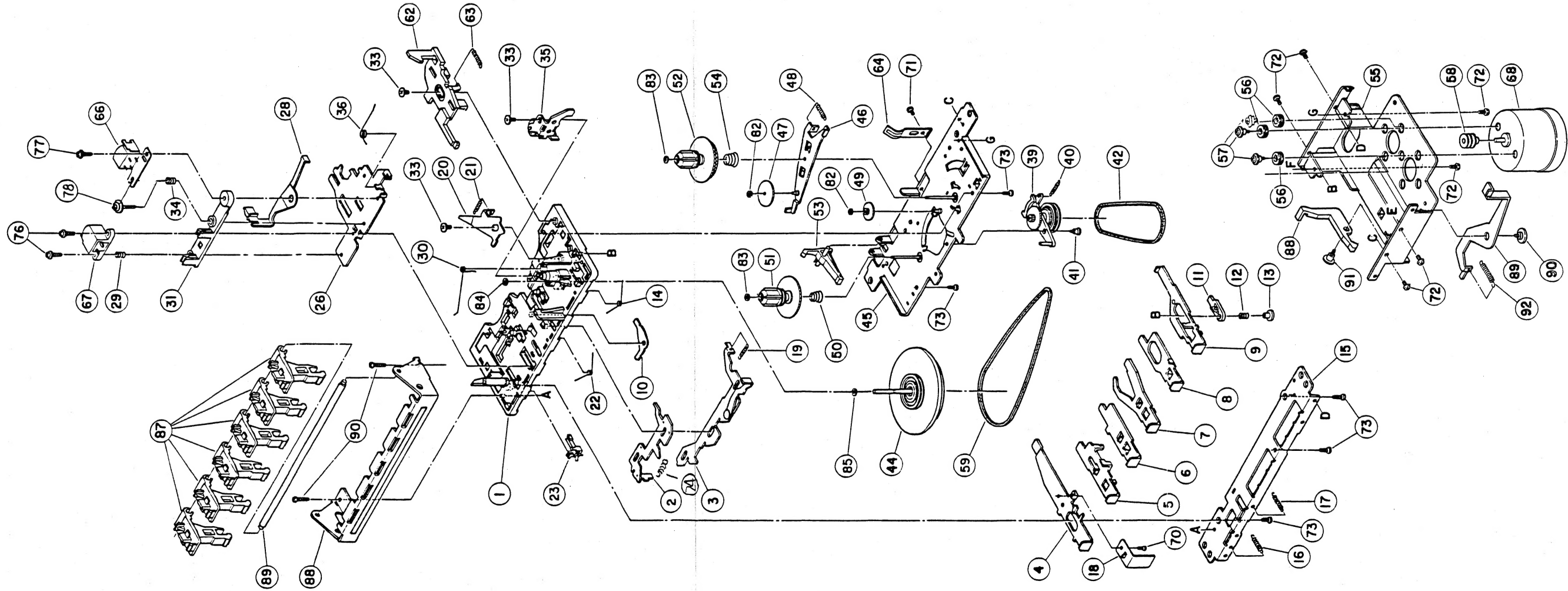
CABINET EXPLODED VIEW



NO.	PART NO.	DESCRIPTION	Q'TY
1	RT1-10075	Front Cabinet	1
2	RT1-10076	Back Cabinet	1
3	8800-30183	Battery Cover	1
4	RT1-30254	Front Cover	1
5	RT1-20143	Cassette Door	2
6	RT1-30255	CRT Bracket	1
7	RT1-30256	Tuning Bracket	1
8	RT1-30257	REC Arm	1
9	RT1-41311	Dial Drum	1
10	RT1-41312	TV Drum	1
11	RT1-41313	Release Knob	2
12	RT1-41314	Dial Pointer	1
13	MDMP470579	Pulley	2
14	MDMP404398	Pulley	2
15	RT1-41315	Knob Base "A"	1
16	RT1-41356	Knob Base "B"	1
17	RT1-41316	Tuning Knob	1
18	RT1-41317	Handle Holder	2
19	RT1-41318	Slide Knob "A"	1
20	RT1-41319	Slide Knob "B"	3
21	RT1-41320	Slide Knob "C"	5
22	RT1-41321	Deck Knob "A"	10
23	RT1-30258	Deck Knob "B"	1
24	RT1-41322	Power Knob	1
25	RT1-41357	NR Knob	1
26	RT1-41323	Handle Bar	1
27	RT1-20144	S/P Front Cabinet	2
28	RT1-10077	S/P Back Cabinet "L"	1
29	RT1-10078	S/P Back Cabinet "R"	1
30	RT1-41324	Speaker Grill	2
31	RT1-41325	Heat Sink	1
32	RT1-41358	PCB Bracket	1
33	RT1-41326	Door Stopper Bracket	1
34	RT1-41328	Counter Bracket	1
35	8800-40915	Battery Terminal	1

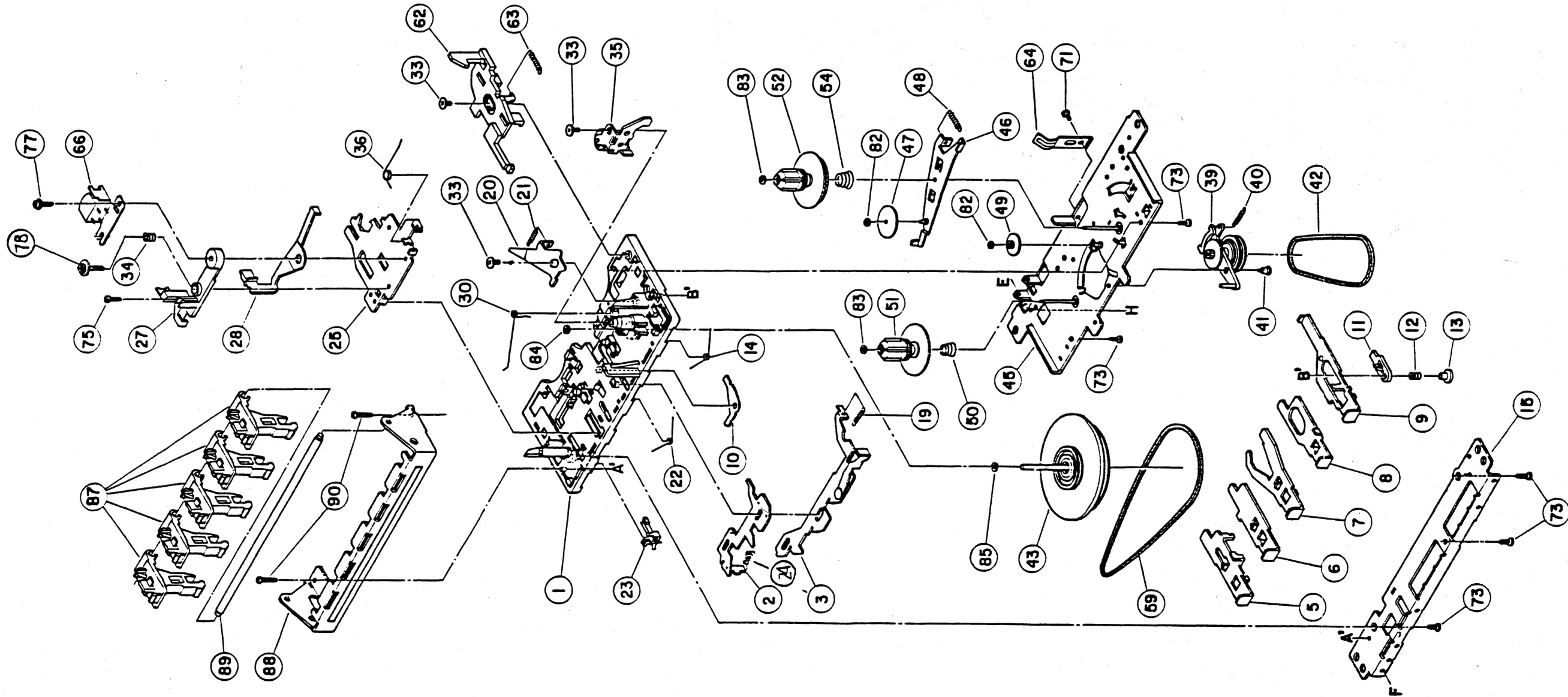
NO.	PART NO.	DESCRIPTION	Q'TY
36	RT1-41329	Guide Bracket	1
37	RT1-41327	Power S/W Bracket	1
38	RT1-41359	REC Shaft	1
39	RT1-41330	Tuning Shaft	1
40	RT1-41331	Decoration Screw	4
41	RT1-41332	Battery Spring	1
42	RT1-41333	B/T Terminal Spring "A"	2
43	RT1-41334	B/T Terminal Spring "B"	1
44	RT1-41335	Door Spring	2
45	RT1-41336	CRT GND Spring	1
46	V333-41106	Dial Spring	1
47	RT1-41337	Dial Window	1
48	RT1-41338	Door Window	2
49	RT1-41484	Insu Plate	2
50	RT1-41340	Vol. Sel Cover	1
51	RT1-41341	Spec Plate	1
52	BP04-40467	Mic Bushing	1
53		Counter Belt	1
54	8800-41047	Battery Cushion	4
55	RT1-41342	FBT Cushion	4
56	RT1-41343	Tape Mirror	2
57	RT1-41344	Battery Ribbon	1
58		Felt	8
59	RT1-41360	Knob Spacer	5
60	4600-41082	Gear Ass'y	2
61	4600-41083	Volume Cover	5
62	RT1-41476	Shield Plate	1
63	RT1-41483	DY Shield Plate	1
64	405-428004	Terminal Plate	2
65	405-426007	Wire Clamper	2
S1	Machine Screw	FLT M2.6x10MsZn	1
S2	Machine Screw	BID M3x6MsZn	3
S3	Machine Screw	BID M3x8MsZn	3
S4	Tapping Screw	BID φ4x12 MsZn	2
S5	TAP Tite	BID φ2x3(S) MsZn	1
S6	TAP Tite	BID φ3x6(B) MsZn	4
S7	Tapping	OVL φ3x12 (T1) MsCr	3
S8	Tapping	BID φ3x8 (T1) MsZn	16
S9	Tapping	BID φ3x10 (T1)	9
S10	Tapping	BID φ3x12 (T1)	3
S11	Tapping	BID φ3x15 (T1)	6
S12	Tapping	BID φ2x25 (T1) MsZn	3
S13	Tapping	BID φ3x30 (T1) MsZn	11
S14	Tapping Screw	BID φ3x60 (T1) MsZn	1
W1	Flt Washer	Fiber φ2xφ5x0.3t	2
W2	Flt Washer	PVC φ3xφ10x2t	2
W3	Flt Washer	SPCC φ3x10x0.8t	1
W4	Flt Washer	SPCC φ3x14x1t	2
W5	Spring Washer	SUS φ14xφ7x0.2t	2
W6		E-Type Ring φ4	1
N1		Nut	6
E1		CRT	1
E2		Speaker	2
E3		Deck	2
E4		Piezo	2
E5		Counter	1
E6		C. Mic	1
E7		F.B.T	1
E8		Slide SW	3
E9		ANT Pad Ass'y	1
E10		Rod Ant	1
E11		TR	2
E12		Main PCB	1
E13		TV PCB	1
E14		CRT PCB	1
E15		Control PCB	1
E16		AC Socket	1
E17		Power Trans	1
E18		Push S.W	1
E19		CRT Socket	1
E20		Mica	2
E21		LED	4
E22		Slide V.R	5
E23		LED PCB	1
E24		Insulator	2
E25		Power PCB	1

DECK EXPLODED VIEW(A)



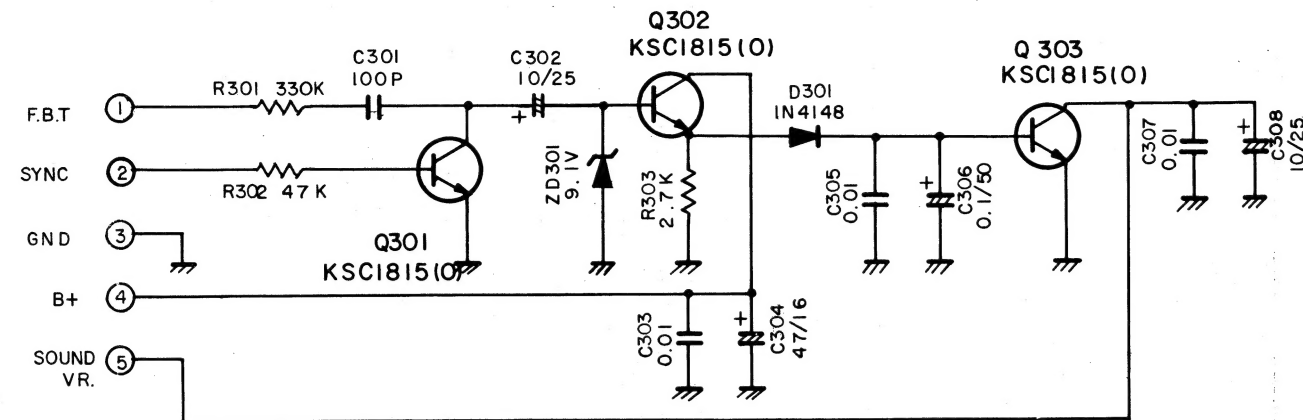
NO.	CODE NO.	DESCRIPTION	QTY
1	1821 01 01	MAIN BASE ASS'Y	2
2	1821 01 05	SWITCH PLATE	2
3	1821 01 501	PUSH BUTTON ACTUATOR ASS'Y	2
4	1821 01 28A	REC BUTTON LEVER	1
5	1821 01 35	PLAY BUTTON LEVER	2
6	1821 01 30	RWD BUTTON LEVER	2
7	1821 01 31	FF BUTTON LEVER	2
8	1821 01 32	STOP BUTTON LEVER	2
9	1821 01 503	PAUSE BUTTON LEVER ASS'Y	2
10	1821 01 68	RWD LEVER	2
11	1821 01 51	PAUSE LEVER	2
12	1821 01 16	PAUSE LEVER SPRING	2
13	1821 01 34	PAUSE STOPPER	2
14	1821 01 23	BUTTON LEVER SPRING(C)	2
15	1821 01 19	SUB CHASSIS	2
16	1821 01 07	BUTTON LEVER SPRING (A)	1
17	1821 01 50	PLAY BUTTON LEVER SPRING (S)	1
18	1510 02 02	REC SPRING PLATE	1
19	1821 01 22	ACTUATOR SPRING	2
20	1821 01 20	AUTO LEVER	2
21	1821 01 21	AUTO LEVER SPRING	2
22	1821 01 49	BUTTON LEVER SPRING (E)	2
23	MSW-1541	LEAF SWITCH	2
24	1821 01 38	SW PLATE SP.	2
25	1821 03 10	HEAD PANEL	1
26	1829 03 04	HEAD PANEL	1
27	1821 03 02	HEAD BASE	1
28	1829 03 301	SENSING PLATE ASS'Y	2
29	1821 03 08	E.H. SPRING	1
30	1821 03 12	HEAD PANEL SPRING (S)	2
31	1829 03 02	HEAD BASE	1
32			
33	1821 13 05	P.M.E SCREW	6
34	1821 03 07	SPRING	2
35	1821 04 301	PINCH ROLLER ARM ASS'Y	2
36	1821 04 02	PINCH ROLLER SPRING	2
37			
38			
39	1821 07 302	RF PULLEY ARM ASS'Y	2
40	1821 07 04	RF PULLEY ARM SPRING	2
41	1867 04 13	RF ARM COLLER SCREW	2
42	1821 07 03	RF BELT	2
43	1821 09 302	FLY WHEEL ASS'Y	1
44	1821 09 301	FLY WHEEL ASS'Y	1
45	1829 10 501A	REEL BASE ASS'Y	2
46	1821 10 503	TAKE UP GEAR PLATE ASS'Y	2
47	1867 03 10	TAKE UP ROLLER GEAR	2
48	1821 10 08	T.G. PLATE SPRING	2
49	1867 03 09	FF GEAR	2
50	1800 05 17	BACK TENSION SPRING	2
51	1821 10 301	SUPPLY REEL ASS'Y	2
52	1829 10 302	TAKE UP REEL ASS'Y	2
53	1800 02 10	RECORD SAFETY LEVER	1
54	1821 10 12	BACK TENSION SPRING	2
55	1821 12 59	MOTOR BRACKET	1
56	1821 12 02	MOTOR RUBBER	3
57	1820 13 06	COLLER SCREW (K)	3
58	1821 12 14	MOTOR PULLEY	1
59	1821 12 21	MAIN BELT	2
60			
61			
62	1821 13 04	EJECT SLIDE LEVER	2
63	1821 13 02	EJECT SLIDE LEVER SPRING	2
64	1821 10 03	PACK SPRING	2
65			
66			
67		R.P. HEAD	2
68		E. HEAD	1
69		MOTOR	1
70			
71	9076 00 00	TAMS SCREW M2x3	1
72	9179 00 00	C.TAPPING SCREW M2x3	2
73	9180 00 00	C.TAPPING SCREW M2x4	6
74	9716 00 00	P.TAPPING BIND SCREW M2x4	10
75			
76	9004 00 00	SCREW M2x6	1
77	9821 00 00	⊕ CAP SCREW M2x8	2
78	9820 00 00	⊕ CAP SCREW M2x7	2
79	9922 00 00	AZIMUTH SCREW	2
80			
81			
82	9421 00 00	P.WASHER CUT 1.2x3x0.25	4
83	9888 00 00	P.WASHER CUT 1.2x3x0.4	4
84	9875 00 00	P.WASHER CUT 1.55x3.8x0.5	2
85	9937 00 00	P.WASHER CUT 2.05x4x0.4	2
86			
87	1821 31 07	OPERATION LEVER	11
88	1821 31 06	B FRAME (S)	2
89	1829 31 03	BUTTON LEVER SHAFT	2
90	9982 00 00	SCREW (FOR CAMERA) M2x7	4
91	1821 12 15	P.KICK LEVER (B)	1
92	1821 12 68	P.KICK LEVER (A)	1
93	1821 12 23	P.K. COLLER SCREW (A)	1
94	1821 12 24	P.K. COLLER SCREW (B)	1
95	1821 12 25	P.KICK LEVER SPRING	1
96			
97			
98			
99			
100			

DECK EXPLODED VIEW (A')

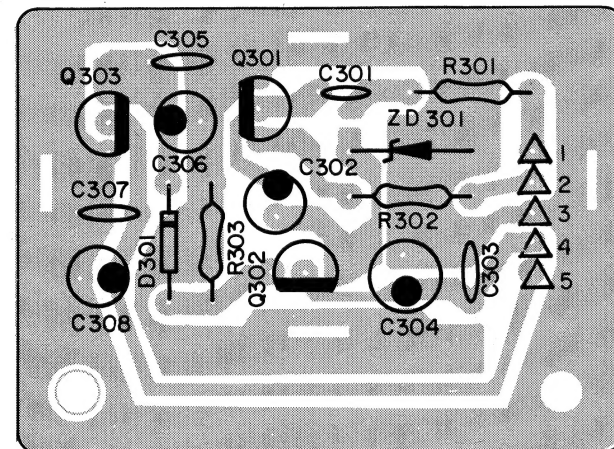


NO.	CODE NO.	DESCRIPTION	QTY
1	1821 01 01	MAIN BASE ASS'Y	2
2	1821 01 05	SWITCH PLATE	2
3	1821 01 501	PUSH BUTTON ACTUATOR ASS'Y	2
4	1821 01 28A	REC BUTTON LEVER	1
5	1821 01 35	PLAY BUTTON LEVER	2
6	1821 01 30	RWD BUTTON LEVER	2
7	1821 01 31	FF BUTTON LEVER	2
8	1821 01 32	STOP BUTTON LEVER	2
9	1821 01 503	PAUSE BUTTON LEVER ASS'Y	2
10	1821 01 68	RWD LEVER	2
11	1821 01 51	PAUSE LEVER	2
12	1821 01 51	PAUSE LEVER SPRING	2
13	1821 01 16	PAUSE STOPPER	2
14	1821 01 34	BUTTON LEVER SPRING(C)	2
15	1821 01 23	BUTTON LEVER SPRING(C)	2
16	1821 01 19	SUB CHASSIS	2
17	1821 01 07	BUTTON LEVER SPRING (A)	1
18	1821 01 50	PLAY BUTTON LEVER SPRING (S)	1
19	1510 02 02	REC SPRING PLATE	1
20	1821 01 22	ACTUATOR SPRING	2
21	1821 01 21	AUTO LEVER	2
22	1821 01 21	AUTO LEVER SPRING	2
23	1821 01 49	BUTTON LEVER SPRING (E)	2
24	MSW-1541	LEAF SWITCH	2
25	1821 01 38	SW PLATE SP.	2
26	1821 03 10	HEAD PANEL	1
27	1829 03 04	HEAD PANEL	1
28	1821 03 02	HEAD BASE	1
29	1829 03 301	SENSING PLATE ASS'Y	2
30	1821 03 08	E.H. SPRING	1
31	1821 03 12	HEAD PANEL SPRING (S)	2
32	1829 03 02	HEAD BASE	1
33	1821 13 05	P.M.E. SCREW	6
34	1821 03 07	SPRING	2
35	1821 04 301	PINCH ROLLER ARM ASS'Y	2
36	1821 04 02	PINCH ROLLER SPRING	2
37			
38			
39	1821 07 302	RF PULLEY ARM ASS'Y	2
40	1821 07 04	RF PULLEY ARM SPRING	2
41	1867 04 13	RF ARM COLLAR SCREW	2
42	1821 07 03	RF BELT	2
43	1821 09 302	FLY WHEEL ASS'Y	1
44	1821 09 301	FLY WHEEL ASS'Y	1
45	1829 10 501A	REEL BASE ASS'Y	2
46	1821 10 503	TAKE UP GEAR PLATE ASS'Y	2
47	1867 03 10	TAKE UP ROLLER GEAR	2
48	1821 10 08	T.G. PLATE SPRING	2
49	1867 03 09	FF GEAR	2
50	1800 05 17	BACK TENSION SPRING	2
51	1821 10 301	SUPPLY REEL ASS'Y	2
52	1829 10 302	TAKE UP REEL ASS'Y	2
53	1800 02 10	RECORD SAFETY LEVER	1
54	1821 10 12	BACK TENSION SPRING	2
55			
56			
57			
58			
59	1821 12 21	MAIN BELT	2
60			
61			
62	1821 13 04	EJECT SLIDE LEVER	2
63	1821 13 02	EJECT SLIDE LEVER SPRING	2
64	1821 10 03	PACK SPRING	2
65			
66			
67			
68			
69			
70	9076 00 00	R.P. HEAD	2
71	9179 00 00	E. HEAD	1
72			
73			
74			
75	9076 00 00	TAMS SCREW M2x3	1
76	9179 00 00	C.TAPPING SCREW M2x3	2
77	9176 00 00	P.TAPPING BIND SCREW M2x4	10
78			
79			
80			
81	9004 00 00	SCREW M2x6	1
82	9821 00 00	⊕ CAP SCREW M2x8	2
83	9820 00 00	⊕ CAP SCREW M2x7	2
84	9922 00 00	AZIMUTH SCREW	2
85			
86			
87			
88	9421 00 00	P.WASHER CUT 1.2x3x0.25	4
89	9888 00 00	P.WASHER CUT 1.2x3x0.4	4
90	9875 00 00	P.WASHER CUT 1.55x3.8x0.5	2
91	9937 00 00	P.WASHER CUT 2.05x4x0.4	2
92			
93	1821 31 07	OPERATION LEVER	11
94			
95			
96			
97			
98			
99			
100			
	1821 12 23	P.K. COLLAR SCREW (A)	1
	1821 12 24	P.K. COLLAR SCREW (B)	1
	1821 12 25	P.KICK LEVER SPRING	1

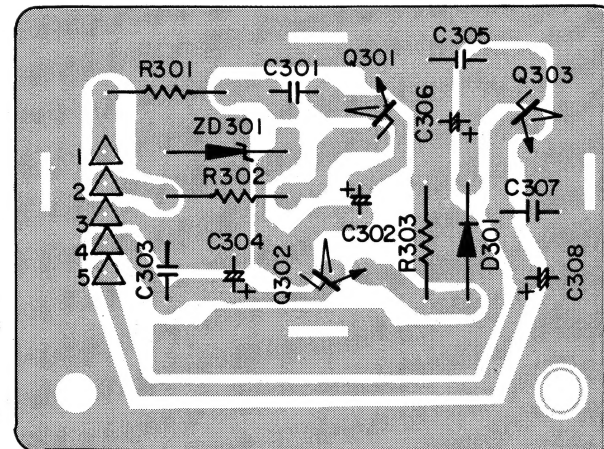
MUTE CIRCUIT



P.C.B. TOP VIEW



P.C.B. BOTTOM VIEW



* REFERENCE *

○ HOW TO CONNECT (At above circuit)

- Number 1 — Soldered to FBT (F2)
- Number 2 — Soldered to IC 2 pin 15 (Sync Signal)
- Number 3 — Soldered to Ground
- Number 4 — Soldered to Q6 Collector (B + Line)
- Number 5 — Soldered to IC3 Pin 8 (Sound)

○ MAJOR ELECTRICAL PARTS LIST

- Transistor: Q301, Q302, Q303 KSC1815 (0)
- Zener Diode: ZD301 9.1V
- Silicon Diode: D301 1N 4148